

## REMARKS

Claim 13 has been objected to in view of a typographical error in claim 13. Applicants thank the Examiner for this careful review of the claims and an appropriate correction will be made upon an indication of allowance of the above-identified application.

Claims 1-20 have been rejected under 35 U.S.C. 112, first paragraph. The Examiner states that the specification while enabling for pigment derived from fish does not provide enablement for the pigment being a mixture of guanine and hypoxanthine. The rejection is respectfully traversed.

The Examiner is kindly invited to page 1, lines 9-13 of the instant specification where it is clearly stated that the pigments derived from fish comprise "a mixture of guanine and hypoxanthine". Further at page 2, line 1, it is stated that the fish scales are collected and "guanine crystals" are isolated from the fish scales. Clearly and unequivocally, the present application clearly states that the pigment derived from fish contains the guanine and hypoxanthine components as claimed. Accordingly, withdrawal of the rejection is respectfully requested.

Claims 1-20 have been rejected under 35 U.S.C. 103 (a) as being unpatentable over Hoercher, et al. (U.S. 4,966,734). The Examiner applies Hoercher, et al. as teaching a process for removal of undesirable odors from fish products by reducing the carbonyl compounds which cause fish odor. The process described in the applied reference involves mixing sodium borohydride solution with fish oil. The Examiner

states that although Hoercher, et al. do not explicitly teach a fish derived pigment in the form of a paste as instantly claimed, the carbonyl compounds which cause fish odor in the instantly claimed fish derived pigment are the same carbonyl compounds of the fish oil in the prior art. The Examiner also states that the primary reference does not teach the organic acid claimed, i.e. acetic acid, nor does the reference teach the use of sodium borohydride in powder form. The Examiner states that the burden shifts to applicant to show unexpected results using acetic acid and sodium borohydride in powder form. The Examiner finally concludes that it would be obvious to one of ordinary skill in the art at the time the invention was made to remove undesirable odor from the fish products using a complex metal hydride and organic acid as taught by Hoercher, et al. The rejection is respectfully traversed.

Hoercher, et al. is not at all concerned with the process of the presently claimed invention. While Hoercher, et al. may utilize a complex metal borohydride to remove odors, the patent is not otherwise concerned with the claimed invention which is directed to deodorization of pigment derived from fish. Hoercher, et al. is concerned with deodorizing an oil derived from fish. As stated at column 1, lines 29-39 of Hoercher, et al. a problem with forming products from fish oil is the fish odor. The patent clearly states that the odor is due to unsaturated carbonyl compounds. On the other hand, there is no indication in the present application that the odor from pigment derived from fish scales is due to carbonyl compounds. In fact, the application clearly states at page 2, lines 17-20 that the natural guanine crystals contain impurities believed to be amines which cause an unpleasant odor in the products formulated therewith. Further, as stated at page 10, lines 8-13 of the instant specification, it is believed that the odor contamination in pearlescent pigment

specification, it is believed that the odor contamination in pearlescent pigment material derived from fish is influenced by amine compounds. The Examiner has not applied any reference which suggests that the fish pigment contains carbonyl compounds which cause the odor of the fish pigment. While the applied reference is concerned with removing odor from fish derived products, that product is not the claimed pigment derived from fish but is directed to a fish oil, wholly different from the claimed product of the presently claimed invention. Accordingly, the applied reference does not remotely suggest the claimed process and it is only by using the instant specification can the Examiner suggest that Hoercher, et al. render obvious the claimed process of treating a fish pigment. Hoercher, et al. is not remotely related to treating a fish pigment but is solely related to treating a fish derived oil.

The Examiner dismisses the claimed weight percentages set forth in the claims. It is applicants' position that these percentages cannot be dismissed in as much as Hoercher, et al. is not at all concerned with the claimed process and, in particular, deodorizing the same material. Since Hoercher, et al. is not concerned with treating the claimed material, the patent cannot otherwise suggest the claimed amounts of sodium borohydride utilized, as well as the amount of acid utilized.

The Examiner dismisses the claimed method of using sodium borohydride in powder form. The Examiner is kindly invited to page 8, lines 7-11 of the present application where the advantage of using a powder is clearly set forth. The applied reference is silent on this point and, accordingly, cannot suggest the claimed limitation.

The prior art made of record and not relied upon does not otherwise teach the claimed process of reducing the odor of a fish-derived pigment.

Claims 1-20 have been provisionally rejected on the grounds of obviousness type double patenting over claims of co-pending application 10/908,503. The rejection is respectfully traversed.

First, the mentioned co-pending application has not been allowed. Secondly, the claims of the mentioned application are directed to a particular composition containing a fish-derived pigment including a deodorized pigment. While there may be claims directed to how the pigment is deodorized, the scope of the claimed process as set forth in the present application is wholly different from the composition as set forth in the mentioned application and accordingly, it is believed that the obvious type double patenting rejection is improper.

In view of the above remarks, it is believed that claims 1-20 patentably distinguish over the art made of record and applicants respectfully solicit favorable action on these claims.

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Date

Respectfully submitted,



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